## Amendments to the Claims:

## 1-111 Cancelled. ✓

112. (Currently Amended) A method of screening for compounds that inhibit *S. aureus* DNA-directed DNA polymerase III beta subunit protein, comprising:

- contacting: i) a polypeptide having the amino acid sequence of SEQ ID NO: 99; ii) a S. aureus DNA-directed DNA polymerase III beta subunit protein; and iii) at least one test compound; and
- determining whether said at least one test compound reduces <u>a protein:protein</u> the interaction between said DNA polymerase III beta subunit protein and said polypeptide, wherein a reduction in said interaction is indicative that said test compound inhibits said *S. aureus* DNA-directed DNA polymerase III beta subunit protein.

## 113-118. Cancelled. ✓

119. (New) A method of screening for compounds that inhibit S. aureus dnaN, comprising:

contacting together: i) a bacteriophage 44AHJD ORF25 polypeptide; ii) a dnaN polypeptide, wherein said 44AHJD ORF25 polypeptide and said dnaN polypeptide bind specifically to each other; and iii) at least one test compound; and

determining whether said at least one test compound reduces binding between said dnaN polypeptide and said 44AHJD ORF25 polypeptide, wherein a reduction in said binding is indicative that said test compound inhibits *S. aureus* dnaN.

120. (New) The method of claim 119, said 44AHJD ORF25 polypeptide inhibits bacterial growth when expressed in *S. aureus*.



- 121. (New) The method of claim 119, wherein said 44AHJD ORF25 polypeptide is selected from the group consisting of polypeptides comprising the amino acid sequence of SEQ ID NO: 99, and fragments or variants thereof.
- 122. (New) The method of claim 119, wherein said 44AHJD ORF25 polypeptide comprises a region having at least 50% identity with SEQ ID NO: 99.
- 123. (New) The method of claim 122, wherein said identity is of at least 75%.
- 124. (New) The method of claim 122, wherein said identity is of at least 95%.
- 125. (New) The method of claim 119, wherein said dnaN polypeptide consists of *S. aureus* DNA-directed DNA polymerase III beta subunit protein, or a fragment or variant thereof.
- 126. (New) The method of claim 119, wherein said dnaN polypeptide has the amino acid sequence of SEQ ID NO: 2.
- 127. (New) The method of claim 119, wherein said dnaN polypeptide is selected from the group consisting of polypeptides comprising the amino acid sequence of SEQ ID NO: 2, and fragments or variants thereof.
- 128. (New) The method of claim 119, wherein said binding determination comprises detecting a protein:protein interaction between said dnaN polypeptide and said 44AHJD ORF25 polypeptide.
- 129. (New) The method of claim 119, wherein either one or both of said dnaN polypeptide and said 44AHJD ORF25 polypeptide is directly or indirectly labeled.



- 130. (New) The method of claim 128, wherein detection of said protein:protein interaction comprises a measurement by a technique selected from the group consisting of phage display, surface plasmon resonance, fluorescence resonance energy transfer, fluorescence polarization changes, scintillation proximity assay affinity chromatography, biosensor assay, immuprecipitation, crosslinking, and yeast two hybrid.
- 131. (New) The method of claim 119, wherein said test compound is selected from the group consisting of small molecules, peptidomimetics, and fragments or derivatives of bacteriophage proteins.
- 132. (New) The method of claim 119, further comprising measuring whether said test compound binds to or reduces the level of activity of *S. aureus* DNA-directed DNA polymerase III beta subunit protein.
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- 133. (New) The method of claim 119, further comprising measuring whether said test compound inhibits bacterial growth.
- 134. (New) A method of screening for potential antibacterial agents, said method comprising:
  - contacting together: i) a bacteriophage polypeptide, ii) a dnaN polypeptide and iii) at least one test compound, wherein said bacteriophage polypeptide and said dnaN polypeptide bind specifically to each other;
  - determining whether said test compound inhibits said binding; and
  - selecting any said test compound inhibiting said binding as a potential antibacterial agent.
- 135. (New) The method of claim 134, wherein said test compound consists of a small molecule.

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136. (New) The method of claim 134, further comprising the step of measuring the ability of the test compound selected in inhibiting S. *aureus* DNA-directed DNA polymerase III beta subunit activity.

137. (New) The method of claim 134, further comprising the step of measuring bactericidal or bacteriostatic activity of the test compound selected.